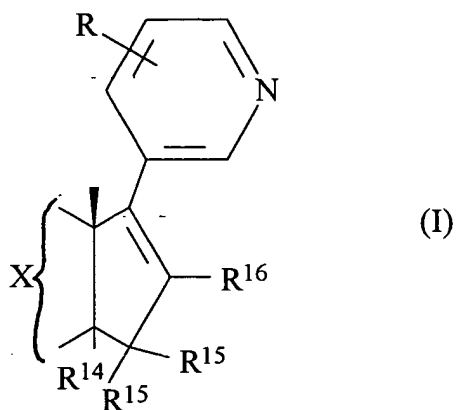


T520X



wherein X represents the residue of the A, B and C rings of a steroid selected from the group consisting of

- androstan-3 α - or 3 β -ol,
- androst-5-en-3 α - or 3 β -ol,
- androst-4-en-3-one,
- androst-2-ene,
- androst-4-ene,
- androst-5-ene,
- androsta-5,7-dien-3 α or 3 β -ol,
- androsta-1,4-dien-3-one,

androsta-3,5-diene,

androsta-3,5-dien-3-ol,

estra-1,3,5[10]-triene and

estra-1,3,5[10]-trien-3-ol,

5 α -androstan-3-one,

androst-4-ene-3,11-dione,

6-fluoroandrost-4-ene-3-one,

androstan-4-ene-3,6-dione,

each of which, where structurally permissible, can be further derivatised in one or more of the following ways:

- to form 3-esters

- to have one or more carbon to carbon ring double bonds in any of the 5,6-,

6,7-, 7,8-, 9,11- and 11,12-positions

- as 3-oximes

- as 3-methylenes

- as 3-carboxylates

- as 3-nitriles

- as 3-nitros

- as 3-desoxy derivatives

- to have one or more hydroxy, halo, C₁₋₄-alkyl, trifluoro- methyl, C₁₋₄-alkoxy, C₁₋₄-alkanoyloxy, benzoyloxy, oxo, methylene or alkenyl substituents in the A, B, or C-ring

- to be 19-nor;

R represents a hydrogen atom or an alkyl group of 1-4 carbon atoms;

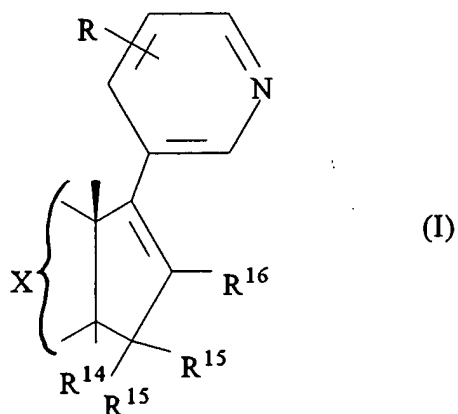
R¹⁴ represents a hydrogen atom, a halogen atom or an alkyl group of 1 to 4 carbon atoms;

each of the R¹⁵ substituents independently represents a hydrogen atom or an alkyl or alkoxy group of 1-4 carbon atoms, a hydroxy group or an alkylcarbonyloxy group of 2 to 5 carbon atoms or together represent an oxo or methylene group or R¹⁴ and one of the R¹⁵ groups together represent a double bond and the other R¹⁵ group represents a hydrogen atom or an alkyl group of 1 to 4 carbon atoms; and

R¹⁶ represents a hydrogen atom, halogen atom, or an alkyl group of 1 to 4 carbon atoms, in the form of the free bases or pharmaceutically acceptable acid addition salts, but excluding 3 β -acetoxy-17-(3-pyridyl)androsta-5,14,16-triene, 3 β ,15 α - and 3 β , 15 β -diacetoxy-17-(3-pyridyl)androsta-5,16-diene and 3 β -methoxy-17-(3-pyridyl-5 α -androst-16-ene.

236 (amended). A method of treating an androgen-dependent or estrogen-dependent disorder which comprises administering to a patient in a therapeutically effective dose a compound of the formula (1):

T550X



wherein X represents the residue of the A, B and C rings of a steroid selected from the group consisting of

- androstan-3 α - or 3 β -ol,
androst-5-en-3 α - or 3 β -ol,
androst-4-en-3-one,
androst-2-ene,
androst-4-ene,
androst-5-ene,
androsta-5,7-dien-3 α or 3 β -ol,
androsta-1,4-dien-3-one,
androsta-3,5-diene,
androsta-3,5-dien-3-ol,
estra-1,3,5[10]-triene and

estra-1,3,5[10]-trien-3-ol,

5 α -androstan-3-one,

androst-4-ene-3,11-dione,

6-fluoroandrost-4-ene-3-one,

androstan-4-ene-3,6-dione,

each of which, where structurally permissible, can be further derivatised in one or more of the following ways:

- to form 3-esters
- to have one or more carbon or carbon ring double bonds in any of the 5,6-,

6,7-, 7,8-, 9,11- and 11,12-positions

- as 3-oximes
- as 3-methylenes
- as 3-carboxylates
- as 3-nitriles
- as 3-nitros
- as 3-desoxy derivatives
- to have one or more hydroxy, halo, C₁₋₄-alkyl, trifluoro- methyl, C₁₋₄-alkoxy, C₁₋₄-alkanoyloxy, benzoyloxy, oxo, methylene or alkenyl substituents in the A, B, or C-ring

- to be 19-nor;;

R represents a hydrogen atom or an alkyl group of 1-4 carbon atoms;

R^{14} represents a hydrogen atom, a halogen atom or an alkyl group of 1 to 4 carbon atoms;

each of the R^{15} substituents independently represents a hydrogen atom or an alkyl or alkoxy group of 1-4 carbon atoms, a hydroxy group or an alkylcarbonyloxy group of 2 to 5 carbon atoms or together represent an oxo or methylene group or R^{14} and one of the R^{15} groups together represent a double bond and the other R^{15} group represents a hydrogen atom or an alkyl group of 1 to 4 carbon atoms; and

R^{16} represents a hydrogen atom, halogen atom, or an alkyl group of 1 to 4 carbon atoms, in the form of the free bases or pharmaceutically acceptable acid addition salts.
